

Appendix D - NRLMD Compliance Table

Northern Rockies Lynx Management Direction Standards & Guidelines Consistency Evaluation Table for Project Specific Activities

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Implementation of the Northern Rockies Lynx Management Direction

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REQUIRED MONITORING Error! Bookmark not defined.

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⁴³ Refer to Glossary on page 8 for definitions

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Notes: (1) For those areas identified as occupied lynx habitat in the *Occupied Mapped Lynx Habitat Amendment to the Canada Lynx Conservation Agreement* (USDA Forest Service et al. 2006), management direction are the standards and guidelines displayed below. As stated in the ROD (p. 29) unoccupied forests should consider this management direction.
 (2) Where superscript numbers (⁴³) appear, refer to the Glossary definitions on pages 11-15.

Northern Rockies Lynx Management Direction	Is direction applicable to this project and has it been met (Yes or No and Met or Not Met)? Where direction is applicable but has not been met, explain the reason(s).
<u>ALL MANAGEMENT PRACTICES AND ACTIVITIES (ALL)</u> <i>The following objectives, standards and guidelines apply to management projects in lynx habitat in lynx analysis units (LAU) and in linkage areas, subject to valid existing rights. They do not apply to wildfire suppression, or to wildland fire use</i>	
<u>Standard⁴³ ALL S1</u> New or expanded permanent developments ³³ and vegetation management projects ⁴⁸ must maintain ²⁶ habitat connectivity ¹⁶ <i>in an LAU²¹ and/or linkage area²²</i> .	Yes. The project area, which lies at the intersection of 5 LAUs, comprises 11% of the total mapped lynx habitat in the action area. If all project area acres were treated, there would still be 89% of the action area remaining as suitable lynx habitat providing ample habitat connectivity.
<u>Guideline¹⁵ ALL G1</u> Methods to avoid or reduce effects on lynx should be used when constructing or reconstructing highways ¹⁸ or forest highways ¹² across federal land. Methods could include fencing, underpasses or overpasses.	No. The proposed action does not contain this activity.
<u>Standard LAU S1</u> <i>Changes in LAU²¹ boundaries shall be based on site-specific habitat information and after review by the Forest Service Regional Office.</i>	No changes in LAU boundaries are part of the proposed action.
<u>VEGETATION MANAGEMENT PROJETS (VEG)</u> <i>The following objectives, standards and guidelines apply to vegetation management projects in lynx habitat in lynx analysis units (LAU). With the exception of Objective VEG O3 that specifically concerns wildland fire use, the objectives, standards and guidelines do not apply to wildfire suppression, wildland fire use, or removal of vegetation for permanent developments like mineral operations, ski runs, roads and the like. None of the objectives, standards, or guidelines apply to linkage areas.</i>	
<u>Standard VEG S1 – Stand initiation structural stage limits</u> Standard VEG S1 applies to all vegetation management ⁴⁸ projects that regenerate ³⁷ timber, except for fuel treatment ¹³ projects within the wildland	Yes. Based on current modeling, three of the five LAUs (Little Boulder-Chicken Creek, Piquett-Black, and Rock-Ward) exceed the maximum amount of 30% of habitat in the stand initiation structural

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<p>urban interface (WUI)⁴⁹ as defined by HFRA, subject to the following limitation: Fuel treatment projects within the WUI that do not meet Standards VEG S1, VEG S2, VEG S5, and VEG S6 may occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).</p> <p>For fuel treatment projects within the WUI see guideline VEG G10.</p> <p>The Standard: Unless a broad scale assessment has been completed that substantiates different historic levels of stand initiation structural stages⁴⁴ limit disturbance in each LAU as follows:</p> <p>If more than 30 percent of the lynx habitat in an LAU is currently in a stand initiation structural stage that does not yet provide winter snowshoe hare habitat, no additional habitat may be regenerated by vegetation management projects.</p>	<p>stage that does not yet provide winter snowshoe hare habitat. Nez Perce-Little Blue Joint and Soda Springs-Sheephead would be well below the threshold. If all project acres outside of Wilderness Study Areas and Inventoried Roadless Areas were treated by regeneration harvest (maximum effect), each LAU would increase the current percentage of mapped Early Stand Initiation to: Little Boulder-Chicken Creek 45%; Nez Perce-Little Blue Joint 21%; Piquett-Black 42%; Rock-Ward 30%; and Soda Springs-Sheephead 23%. Therefore, the Forest Wildlife Biologist will confirm which stands currently are restricted from regeneration harvest in the Little Boulder-Chicken Creek, Piquett-Black, and Rock-Ward LAUs.</p>										
<p><u>Standard VEG S2 – Limits on regeneration from timber mgmt. projects</u> Standard VEG S2 applies to all vegetation management⁴⁸ projects that regenerate³⁷ timber, except for fuel treatment¹³ projects within the wildland urban interface (WUI)⁴⁹ as defined by HFRA, subject to the following limitation:</p> <p>Fuel treatment projects within the WUI⁴⁹ that do not meet Standards VEG S1, VEG S2, VEG S5, and VEG S6 may occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).</p> <p>For fuel treatment projects within the WUI⁴⁹ see guideline VEG G10.</p> <p>The Standard: Timber management projects shall not regenerate³⁷ more than 15 percent of lynx habitat on NFS lands in an LAU in a ten-year period.</p>	<p>Yes. No lynx habitat will be regenerated in excess of 15% of the LAU by vegetation management if the LAU exceeds this threshold. The current percentage of lynx habitat that has been regenerated in each LAU is displayed below.</p> <table border="1" data-bbox="1108 1010 1642 1218"> <tr> <td>Little Boulder-Chicken Creek LAU</td><td>2%</td></tr> <tr> <td>Nez Perce Fork-Little Blue Joint LAU</td><td>1%</td></tr> <tr> <td>Piquett-Black LAU</td><td>4%</td></tr> <tr> <td>Rock-Ward LAU</td><td>0%</td></tr> <tr> <td>Soda Springs-Sheephead LAU</td><td>0%</td></tr> </table>	Little Boulder-Chicken Creek LAU	2%	Nez Perce Fork-Little Blue Joint LAU	1%	Piquett-Black LAU	4%	Rock-Ward LAU	0%	Soda Springs-Sheephead LAU	0%
Little Boulder-Chicken Creek LAU	2%										
Nez Perce Fork-Little Blue Joint LAU	1%										
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<p><u>Guideline VEG G11 – Denning habitat</u></p>											

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<p><i>Denning habitat⁶ should be distributed in each LAU in the form of pockets of large amounts of large woody debris, either down logs or root wads, or large piles of small wind thrown trees ("jack-strawed" piles). If denning habitat appears to be lacking in the LAU, then projects should be designed to retain some coarse woody debris⁴, piles, or residual trees to provide denning habitat⁶ in the future.</i></p>	
<p><u>Standard VEG S5 – Precommercial thinning limits</u> Standard VEG S5 applies to all precommercial thinning³⁵ projects, except for fuel treatment¹³ projects that use precommercial thinning as a tool within the wildland urban interface (WUI)⁴⁹ as defined by HFRA, subject to the following limitation:</p> <p>Fuel treatment projects within the WUI⁴⁹ that do not meet Standards VEG S1, VEG S2, VEG S5, and VEG S6 may occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).</p> <p>For fuel treatment projects within the WUI⁴⁹ see guideline VEG G10.</p> <p>The Standard: Precommercial thinning projects that reduce snowshoe hare habitat, may occur from the stand initiation structural stage⁴⁴ until the stands no longer provide winter snowshoe hare habitat only:</p> <ol style="list-style-type: none"> 1. Within 200 feet of administrative sites, dwellings, or outbuildings; or 2. For research studies³⁸ or genetic tree tests evaluating genetically improved reforestation stock; or 3. Based on new information that is peer reviewed and accepted by the regional levels of the Forest Service and FWS, where a written determination states: <ol style="list-style-type: none"> a. that a project is not likely to adversely affect lynx; or 	<p>Yes. This standard will be met within all LAUs.</p>

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Northern Rockies Lynx Management Direction	Is direction applicable to this project and has it been met (Yes or No and Met or Not Met)? Where direction is applicable but has not been met, explain the reason(s).
<p>b. that a project is likely to have short term adverse effects on lynx or its habitat, but would result in long-term benefits to lynx and its habitat; or</p> <p>4. For conifer removal in aspen, or daylight thinning⁵ around individual aspen trees, where aspen is in decline; or</p> <p>5. For daylight thinning of planted rust-resistant white pine where 80 % of the winter snowshoe hare habitat⁵⁰ is retained; or</p> <p>6. To restore whitebark pine.</p>	
<p><u>Standard VEG S6 – Multi-storied stands & snowshoe hare horizontal cover</u></p> <p>Standard VEG S6 applies to all vegetation management⁴⁸ projects, except for fuel treatment¹³ projects within the wildland urban interface (WUI)⁴⁹ as defined by HFRA, subject to the following limitation:</p> <p>Fuel treatment projects within the WUI⁴⁹ that do not meet Standards VEG S1, VEG S2, VEG S5, and VEG S6 may occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).</p> <p>For fuel treatment projects within the WUI⁴⁹ see guideline VEG G10.</p> <p>The Standard: Vegetation management projects that reduce snowshoe hare habitat in multi-story mature or late successional forests²⁹ may occur only:</p> <ol style="list-style-type: none"> 1. Within 200 feet of administrative sites, dwellings, outbuildings, recreation sites, and special use permit improvements, including infrastructure within permitted ski area boundaries; or 2. For research studies³⁸ or genetic tree tests evaluating genetically improved reforestation stock; or 3. For incidental removal during salvage harvest⁴¹ (e.g. removal due to location of skid trails). 	<p>Yes. This standard will be met in all LAUs.</p>

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Northern Rockies Lynx Management Direction	Is direction applicable to this project and has it been met (Yes or No and Met or Not Met)? Where direction is applicable but has not been met, explain the reason(s).
(NOTE: Timber harvest is allowed in areas that have potential to improve winter snowshoe hare habitat but presently have poorly developed understories that lack dense horizontal cover [e.g. uneven age management systems could be used to create openings where there is little understory so that new forage can grow]).	
<p><u>Guideline VEG G1 – Lynx habitat improvement</u> Vegetation management⁴⁸ projects should be planned to recruit a high density of conifers, hardwoods, and shrubs where such habitat is scarce or not available. Priority should be given to stem-exclusion, closed-canopy structural stage⁴⁴ <i>stands for lynx or their prey</i> (e.g. <i>mesic, monotypic lodgepole stands</i>).</p> <p>Winter snowshoe hare habitat⁵⁰ should be near denning habitat⁶.</p>	Yes. The vegetation management treatments will target stands that currently do not provide winter snowshoe hare habitat in order to recruit a higher density of conifers and shrubs.
<p><u>Guideline VEG G4 – Prescribed Fire</u> Prescribed fire³⁴ activities should not create permanent travel routes that facilitate snow compaction. Constructing permanent firebreaks on ridges or saddles should be avoided.</p>	Yes. This guideline will be met.
<p><u>Guideline VEG G5 – Habitat for alternate prey species</u> Habitat for alternate prey species, primarily red squirrel³⁶, should be provided in each LAU.</p>	Yes. The vegetation management treatments will target stands that currently do not provide winter snowshoe hare habitat in order to recruit a higher density of conifers and shrubs to provide habitat for alternate prey species.
<p><u>Guideline VEG G10 – Fuel treatments in the WUI</u> <i>Fuel treatment projects in the WUI⁴⁹ as defined by HFRA^{17, 48} should be designed considering standards VEG S1, S2, S5, and S6 to promote lynx conservation.</i></p>	Yes. The vegetation management treatments in the WUI will target stands that are currently modeled to show a high potential for catastrophic wildfire. Treatment of these areas will help mitigate potential catastrophic wildfires while recruiting a higher density of conifers and shrubs.
<p><u>LIVESTOCK MANAGEMENT (GRAZ)</u> <i>The following objectives and guidelines apply to grazing projects in lynx habitat in lynx analysis units (LAU). They do not apply to linkage areas.</i></p>	
<p><u>Guideline GRAZ G1 – Livestock grazing and openings</u> In fire- and harvest-created openings, livestock grazing should be managed so impacts do not prevent shrubs and trees from regenerating.</p>	No. There are currently no active livestock allotments in the project area.

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Northern Rockies Lynx Management Direction	Is direction applicable to this project and has it been met (Yes or No and Met or Not Met)? Where direction is applicable but has not been met, explain the reason(s).
<p><u>Guideline GRAZ G2 – Livestock grazing and aspen</u> In aspen stands, livestock grazing should be managed to contribute to the long-term health and sustainability of aspen.</p>	No. There are currently no active livestock allotments in the project area.
<p><u>Guideline GRAZ G3 – Livestock grazing and riparian areas & willow carrs</u> In riparian areas⁴⁰ and willow carrs³, livestock grazing should be managed to contribute to maintaining or achieving a preponderance of mid- or late-seral stages²⁸, similar to conditions that would have occurred under historic disturbance regimes.</p>	No. There are currently no active livestock allotments in the project area.
<p><u>Guideline GRAZ G4 – Livestock grazing and shrub-steppe habitats</u> In shrub-steppe habitats⁴², livestock grazing should be managed in the elevation ranges of forested lynx habitat in LAUs²¹, to contribute to maintaining or achieving a preponderance of mid- or late-seral stages, similar to conditions that would have occurred under historic disturbance regimes.</p>	No. There are currently no active livestock allotments in the project area.
<p><u>HUMAN USE PROJETS (HU)</u> The following objectives and guidelines apply to <i>human use projects</i>, such as <i>special uses (other than grazing)</i>, <i>recreation management</i>, <i>roads</i>, <i>highways</i>, <i>mineral and energy development</i>, in <i>lynx habitat in lynx analysis units (LAU)</i>, subject to valid existing rights. <i>They do not apply to vegetation management projects or grazing projects directly. They do not apply to linkage areas.</i></p>	
<p><u>Guideline HU G1 – Ski area expansion & development, inter-trail islands</u> When developing or expanding ski areas, provisions should be made for adequately sized inter-trail islands that include coarse woody debris⁴, so winter snowshoe hare habitat⁴⁹ is maintained.</p>	No. No ski areas exist within the project area.
<p><u>Guideline HU G2 – Ski are expansion & development, foraging habitat</u> When developing or expanding ski areas, foraging should be provided consistent with the ski area's operational needs, especially where lynx habitat occurs as narrow bands of coniferous forest across mountain</p>	No. No ski areas exist within the project area.

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slopes.	
<u>Guideline HU G3 – Recreation developments</u> Recreation developments and operations should be planned in ways that both provide for lynx movement and maintain the effectiveness of lynx habitat ²³ .	No recreation development is part of the proposed action.
<u>Guideline HU G4 – Mineral & energy development</u> For mineral and energy development sites and facilities, remote monitoring should be encouraged to reduce snow compaction.	No mineral and energy development is part of the proposed action.
<u>Guideline HU G5 – Mineral & energy development, habitat restoration</u> For mineral and energy development sites and facilities that are closed, a reclamation plan that restores ³⁹ lynx habitat should be developed.	No mineral and energy development is part of the proposed action.
<u>Guideline HU G6 – Roads, upgrading</u> Methods to avoid or reduce effects to lynx should be used in lynx habitat when upgrading unpaved roads to maintenance levels 4 or 5, if the result would be increased traffic speeds and volumes, or a foreseeable contribution to increases in human activity or development.	No road upgrading is part of the proposed action.
<u>Guideline HU G7 – Roads, locations</u> New permanent roads should not be built on ridge-tops and saddles, or in areas identified as important for lynx habitat connectivity ¹⁶ . New permanent roads and trails should be situated away from forested stringers.	Yes. Permanent roads will not be located on ridge-tops or saddles as part of the proposed action.
<u>Guideline HU G8 – Roads, brushing</u> Cutting brush along low-speed ²⁵ , low-traffic-volume roads should be done to the minimum level necessary to provide for public safety.	Yes. This guideline will be met for any road brushing that occurs in the project area.
<u>Guideline HU G9 – Roads, new</u> On new roads built for projects, public motorized use should be restricted. Effective closures should be provided in road designs. When the project is over, these roads should be reclaimed or decommissioned, if not needed for other management objectives.	Yes. No permanent roads will be open for public motorized use.
<u>Guideline HU G10 – Roads, ski area access</u>	No. No ski areas exist within the project area.

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Northern Rockies Lynx Management Direction	Is direction applicable to this project and has it been met (Yes or No and Met or Not Met)? Where direction is applicable but has not been met, explain the reason(s).
<i>When developing or expanding ski areas and trails, access roads and lift termini to maintain and provide lynx security¹⁰ habitat.</i>	
<p><u>Guideline HU G11 – Snow compaction</u> Designated over-the-snow routes, or designated play areas, should not expand outside baseline areas of consistent snow compaction¹, unless designation serves to consolidate use and improve lynx habitat. This is calculated on an LAU basis, or on a combination of immediately adjacent LAUs. This does not apply inside permitted ski area boundaries, to winter logging, to rerouting trails for public safety, to accessing private inholdings, or to access regulated by Guideline HU G12. Use the same analysis boundaries for all actions subject to this guideline.</p>	No. This is not part of the proposed action.
<p><u>Guideline HU G12 – Winter access for non-recreation SUP & mineral & energy development</u> Winter access for non-recreation special uses, and mineral and energy exploration and development, should be limited to designated routes⁸ or designated over-the-snow routes⁷.</p>	No. This is not part of the proposed action.
<p><u>LINKAGE AREAS (LINK)</u> The following objective, standard and guidelines apply to <i>all projects within linkage areas</i>, subject to valid existing rights.</p>	
<p><u>Standard LINK S1 – Highway or forest highway construction in linkage areas</u> When highway¹⁸ or forest highway¹² construction or reconstruction is proposed in linkage areas²², identify potential highway crossings.</p>	No. This is not part of the proposed action.
<p><u>Guideline LINK G1 – Land exchanges</u> NFS lands should be retained in public ownership.</p>	No. This is not part of the proposed action.
<p><u>Guideline LINK G2 – Livestock grazing in shrub-steppe habitats</u> <i>Livestock grazing in shrub-steppe habitats⁴² should be managed to contribute to maintaining or achieving a preponderance of mid- or late-seral stages²⁸, similar to conditions that would have occurred under historic disturbance regimes.</i></p>	No. This is not part of the proposed action.

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GLOSSARY

¹ *Areas of consistent snow compaction* – An area of consistent snow compaction is an area of land or water that during winter is generally covered with snow and gets enough human use that individual tracks are indistinguishable. In such places, compacted snow is evident most of the time, except immediately after (within 48 hours) snowfall. These can be areas or linear routes, and are generally found in near snowmobile or cross-country ski routes, in adjacent openings, parks and meadows, near ski huts or plowed roads, or in winter parking areas. Areas of consistent snow compaction will be determined based on the area or miles used in 1998 to 2000.

² *Broad scale assessment* – A broad scale assessment is a synthesis of current scientific knowledge, including a description of uncertainties and assumptions, to provide an understanding of past and present conditions and future trends, and a characterization of the ecological, social and economic components of an area. (LCAS)

³ *Carr* – Deciduous woodland or shrub land occurring on permanently wet, organic soil. (LCAS)

⁴ *Course woody debris* – Any piece(s) of dead woody material, e.g., dead boles, limbs, and large root masses on the ground or in streams. (LCAS)

⁵ *Daylight thinning* – Daylight thinning is a form of precommercial thinning that removes the trees and brush inside a given radius around a tree.

⁶ *Denning habitat (lynx)* – Denning habitat is the environment lynx use when giving birth and rearing kittens until they are mobile. The most common component is large amounts of coarse woody debris to provide escape and thermal cover for kittens. Denning habitat must be within daily travel distance of winter snowshoe hare habitat – the typical maximum daily distance for females is about three to six miles. Denning habitat includes mature and old growth²⁴ forests with plenty of coarse woody debris. It can also include young regenerating forests with piles of coarse woody debris, or areas where down trees are jack-strawed.

⁷ *Designated over-the-snow routes* – Designated over-the-snow routes are routes managed under permit or agreement or by the agency, where use is encouraged, either by on-the-ground marking or by publication in brochures, recreation opportunity guides or maps (other than travel maps) or in electronic media produced or approved by the agency. The routes identified in outfitter and guide permits are designated by definition; groomed routes also are designated by definition. The determination of baseline snow compaction will be based on the miles of designated over-the-snow routes authorized, promoted or encouraged in 1998 to 2000.

⁸ *Designated route* – A designated route is a road or trail that has been identified as open for specified travel use.

⁹ *Developed recreation* – Developed recreation requires facilities that result in concentrated use. For example, skiing requires lifts, parking lots, buildings and roads; campgrounds require roads, picnic tables and toilet facilities.

¹⁰ *Security habitat (lynx)* – Security habitat amounts to places in lynx habitat that provide secure winter bedding sites for lynx in highly disturbed landscapes like ski areas. Security habitat gives lynx the ability to retreat from human disturbance. Forest structures that make human access difficult generally discourage human activity in security habitats. Security habitats are most effective if big

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enough to provide visual and acoustic insulation and to let lynx easily move away from any intrusion. They must be close to winter snowshoe hare habitat. (LCAS)

¹¹ *Fire use* – Fire use is the combination of wildland fire use and using prescribed fire to meet resource objectives. (NIFC) Wildland fire use is the management of naturally ignited wildland fires to accomplish resource management objectives in areas that have a fire management plan. The use of the term wildland fire use replaces the term prescribed natural fire. (Wildland and Prescribed Fire Management Policy, August 1998)

¹² *Forest highway* – A forest highway is a forest road under the jurisdiction of, and maintained by, a public authority and open to public travel (USC: Title 23, Section 101(a)), designated by an agreement with the FS, state transportation agency and Federal Highway Administration.

¹³ *Fuel treatment* – A fuel treatment is a management action that reduces the threat of ignition and fire intensity or rate of spread, or is used to restore fire-adapted ecosystems.

¹⁴ *Goal* – A goal is a broad description of what an agency is trying to achieve, found in a land management plan. (LCAS)

¹⁵ *Guideline* – A guideline is a particular management action that should be used to meet an objective found in a land management plan. The rationale for deviations may be documented, but amending the plan is not required. (LCAS modified)

¹⁶ *Habitat connectivity (lynx)* – Habitat connectivity consists of an adequate amount of vegetation cover arranged in a way that allows lynx to move around. Narrow forested mountain ridges or shrub-steppe plateaus may serve as a link between more extensive areas of lynx habitat; wooded riparian areas may provide travel cover across open valley floors. (LCAS)

¹⁷ *HFRA (Healthy Forests Restoration Act)* - Public Law 108-148, passed in December 2003. The HFRA provides statutory processes for hazardous fuel reduction projects on certain types of at-risk National Forest System and Bureau of Land Management lands. It also provides other authorities and direction to help reduce hazardous fuel and restore healthy forest and rangeland conditions on lands of all ownerships. (Modified from Forest Service HFRA web site.)

¹⁸ *Highway* – The word highway includes all roads that are part of the National Highway System. (23 CFR 470.107(b))

¹⁹ *Horizontal cover* – Horizontal cover is the visual obscurity or cover provided by habitat structures that extend to the ground or snow surface primarily provided by tree stems and tree boughs, but also includes herbaceous vegetation, snow, and landscape topography. Horizontal cover was measured by John Squires et al. (pers. com.) in Northwestern Montana according to the following methodology:

“A canvas cover-board (2 m x 0.5 m) was erected 10 m from plot center in 4 directions (forward track, back track, and at 2, 90° angles) was read to directly measure horizontal cover. The cover board was divided into 4, 0.5 meter blocks and each block was further dividend into quarters. At each reading, technicians estimated horizontal cover by 10% class at each of the 4 heights; these 4 estimates were then averaged for an overall estimate of that reading.” (According to Squires via pers. com., cover measured during the summer period averaged approximately 65% while at den sites it was measured at roughly 85%. During the winter period cover was measured at 45% while at winter kill sites it was slightly greater than 50%.)

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²⁰ *Isolated mountain range* – Isolated mountain ranges are small mountains cut off from other mountains and surrounded by flatlands. On the east side of the Rockies, they are used for analysis instead of sub-basins. Examples are the Little Belts in Montana and the Bighorns in Wyoming.

²¹ *LAU (Lynx Analysis Unit)* – An LAU is an area of at least the size used by an individual lynx, from about 25 to 50 square miles (LCAS). An LAU is a unit for which the effects of a project would be analyzed; its boundaries should remain constant.

²² *Linkage area* – A linkage area provides connectivity between blocks of lynx habitat. Linkage areas occur both within and between geographic areas, where basins, valleys or agricultural lands separate blocks of lynx habitat, or where lynx habitat naturally narrows between blocks. (LCAS updated definition approved by the Steering Committee 10/23/01)

²³ *Lynx habitat* – Lynx habitat occurs in mesic coniferous forest that experience cold, snowy winters and provide a prey base of snowshoe hare. In the northern Rockies, lynx habitat is generally occurs between 3,500 and 8,000 feet of elevation, and primarily consists of lodgepole pine, subalpine fir and Engelmann spruce. It may consist of cedar-hemlock in extreme northern Idaho, northeastern Washington and northwestern Montana, or of Douglas fir on moist sites at higher elevations in central Idaho. It may also consist of cool, moist Douglas fir, grand fir, western larch and aspen when interspersed in subalpine forests. Dry forests do not provide lynx habitat. (LCAS)

²⁴ *Lynx habitat in an unsuitable condition* –Lynx habitat in an unsuitable condition consists of lynx habitat in the stand initiation structural stage where the trees are generally less than ten to 30 years old and have not grown tall enough to protrude above the snow during winter. Stand replacing fire or certain vegetation management projects can create unsuitable conditions. Vegetation management projects that can result in unsuitable habitat include clearcuts and seed tree harvest, and sometimes shelterwood cuts and commercial thinning depending on the resulting stand composition and structure. (LCAS)

²⁵ *Low-speed, low-traffic-volume road* – Low speed is less than 20 miles per hour; low volume is a seasonal average daily traffic load of less than 100 vehicles per day.

²⁶ *Maintain* – In the context of this amendment, maintain means to provide enough lynx habitat to conserve lynx. It does not mean to keep the status quo.

²⁷ *Maintenance level* – Maintenance levels define the level of service provided by and maintenance required for a road. (FSH 7709.58, Sec 12.3) Maintenance level 4 is assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most level 4 roads have double lanes and aggregate surfaced. Some may be single lane; some may be paved or have dust abated. Maintenance level 5 is assigned to roads that provide a high degree of user comfort and convenience. Normally, roads are double-lane and paved, but some may be aggregate surfaced with the dust abated.

²⁸ *Mid-seral or later* – Mid-seral is the successional stage in a plant community that's the midpoint as it moves from bare ground to climax. For riparian areas, it means willows or other shrubs have become established. For shrub-steppe areas, it means shrubs associated with climax are present and increasing in density.

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²⁹ *Multi-story mature or late successional forest* – This stage is similar to the *old multistory structural stage* (see below). However, trees are generally not as old and decaying trees may be somewhat less abundant.

³⁰ *Objective* – An objective is a statement in a land management plan describing desired resource conditions and intended to promote achieving programmatic goals. (LCAS)

³¹ *Old multistory structural stage* – Many age classes and vegetation layers mark the old forest, multistoried stage. It usually contains large old trees. Decaying fallen trees may be present that leave a discontinuous overstory canopy. On cold or moist sites without frequent fires or other disturbance, multi-layer stands with large trees in the uppermost layer develop. (Oliver and Larson, 1996)

³² *Old growth* – Old growth forests generally contain trees that are large for their species and site, and are sometimes decadent with broken tops. Old growth often contains a variety of tree sizes, large snags and logs, and a developed and often patchy understory.

³³ *Permanent development* – A permanent development is any development that results in a loss of lynx habitat for at least 15 years. Ski trails, parking lots, new permanent roads, structures, campgrounds and many special use developments would be considered permanent developments.

³⁴ *Prescribed fire* – A prescribed fire is any fire ignited as a management action to meet specific objectives. A written, approved prescribed fire plan must exist, and NEPA requirements met, before ignition. The term replaces management ignited prescribed fire. (NWCG)

³⁵ *Precommercial thinning* – Precommercial thinning is mechanically removing trees to reduce stocking and concentrate growth on the remaining trees, and not resulting in immediate financial return. (Dictionary of Forestry)

³⁶ *Red squirrel habitat* – Red squirrel habitat consists of coniferous forests of seed and cone-producing age that usually contain snags and downed woody debris, generally associated with mature or older forests.

³⁷ *Regeneration harvest* – The cutting of trees and creating an entire new age class; an even-age harvest. The major methods are clearcutting, seed tree, shelterwood, and group selective cuts (Helms 1998).

³⁸ *Research* – Research consists of studies conducted to increase scientific knowledge or technology. For the purposes of Standards VEG S5 and VEG S6, research applies to studies financed from the forest research budget (FSM 4040) and administrative studies financed from the NF budget.

³⁹ *Restore, restoration* – To restore is to return or re-establish ecosystems or habitats to their original structure and species composition. (Dictionary of Forestry)

⁴⁰ *Riparian area* – An area with distinctive soil and vegetation between a stream or other body of water and the adjacent upland; includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation. (LCAS)

⁴¹ *Salvage harvest* – Salvage harvest is a commercial timber sale of dead, damaged or dying trees. It recovers economic value that would otherwise be lost. Collecting firewood for personal use is not considered salvage harvest.

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⁴² *Shrub steppe habitat* – Shrub steppe habitat consists of dry sites with shrubs and grasslands intermingled.

⁴³ *Standard* – A standard is a required action in a land management plan specifying how to achieve an objective or under what circumstances to refrain from taking action. A plan must be amended to deviate from a standard.

⁴⁴ *Stand initiation structural stage* – The stand initiation stage generally develops after a stand-replacing disturbance by fire or regeneration timber harvest. A new single-story layer of shrubs, tree seedlings and saplings establish and develop, reoccupying the site. Trees that need full sun are likely to dominate these even-aged stands. (Oliver and Larson, 1996)

⁴⁵ *Stem exclusion structural stage* – In the stem exclusion stage, trees initially grow fast and quickly occupy all of the growing space, creating a closed canopy. Because the trees are tall, little light reaches the forest floor so understory plants (including smaller trees) are shaded and grow more slowly. Species that need full sunlight usually die; shrubs and herbs may become dormant. New trees are precluded by a lack of sunlight or moisture. (Oliver and Larson, 1996)

⁴⁶ *Timber management* – Timber management consists of growing, tending, commercially harvesting and regenerating crops of trees.

⁴⁷ *Understory re-initiation structural stage* – In the understory re-initiation stage, a new age class of trees gets established after overstory trees begin to die, are removed or no longer fully occupy their growing space after tall trees abrade each other in the wind. Understory seedlings then re-grow and the trees begin to stratify into vertical layers. A low to moderately dense uneven-aged overstory develops, with some small shade-tolerant trees in the understory. (Oliver and Larson, 1996)

⁴⁸ *Vegetation management projects* – Vegetation management projects change the composition and structure of vegetation to meet specific objectives, using such means as prescribed fire and timber harvest. For the purposes of this amendment, the term does not include removing vegetation for permanent developments like mineral operations, ski runs, roads and the like, and does not apply to fire suppression or to wildland fire use.

⁴⁹ *Wildland urban interface (WUI)* - The area adjacent to an at-risk community that is identified in the community wildfire protection plan. If there is no community wildfire protection plan in place, the WUI is the area 0.5 mile from the boundary of an at-risk community or within 1.5 miles of the boundary of an at-risk community. The WUI could also include areas if the terrain is steep, or there is a nearby road or ridge top that could be incorporated into a fuel break, or the land is in condition class 3, or the area contains an emergency exit route needed for safe evacuations. (Condensed from HFRA. For full text see HFRA § 101.)

⁵⁰ *Winter snowshoe hare habitat* – Winter snowshoe hare habitat consists of places where young trees or shrubs grow dense – thousands of woody stems per acre – and tall enough to protrude above the snow during winter, so hares can browse on the bark and small twigs (Ruediger et al. 2000). Winter snowshoe hare habitat develops primarily in the stand initiation, understory reinitiation and old forest multistoried structural stage.